Better is the Enemy Good Enough

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Introduction

- We all typically try to give our best effort for important matters.
- When is doing better really an enemy to our best effort?
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Topics of Discussion

- How is project scope established?
- The Babylonians had it figured out.
- Good planning and follow-though.
- When better is bad
- Project/ Customer Requirements
- Engineering Requirements
- Problem review, not status

Establishing Scope

- 40x80 Aeroacoustic Project
 - ◆ 90% absorption, 80-20,000 Hz.
 - ◆ Wind speeds 0 300 knots
 - ◆ Improve existing aerodynamics
- New and old acoustic technology with wind tunnel aerodynamics
- When have we really defined what we are going to do?

The Ancients Figured it out!

- Hammurabi Babylon circa 1700 BC
 - "If a builder builds a house for someone and does not construct it properly, and the house which he built falls in and kills its owner, then that builder shall be put to death. If it kills the son of the owner the son of that builder shall be put to death. If it kills a slave of the owner, the he shall pay slave for slave to the owner of the house."
- Jesus Christ Israel, circa 32 AD
 - "Suppose one of you wants to build a tower. Will he not first sit down and estimate the cost to see if he has enough money to complete it? For if he lays the foundation and is not able to finish it, everyone who sees it will ridicule him, saying, 'This fellow began to build and was not able to finish." Luke 14, 28-30

No Substitute for Good Planning

- Follow though is important!
- Especially if your life depends on it.
 - Literally!!!

When is Better the Enemy of Good Enough?

- When anyone expresses a desire to "improve" on the original requirements.
- When R&D efforts fail to close on an economical and timely solution.

What This Means

- Making something better becomes an expensive enemy of good enough when better adversely impacts project cost and schedule.
 - Requirements Creep
 - The customer and their boss
 - Project manager? Allowing creep?? (...never?...) ???
 - ◆ The engineer's sand box
 - "If I just take a few more days."
 - "I will have that done in two weeks."
 - The unchecked R&D Effort
- Design tradeoffs and R&D are important but must be managed.
 - Important cliche
 - The "devil is in the details."
- Knowing what is good enough has to be understood at all working levels of the project.

An Ounce of Prevention

- Iron Clad Requirements Document
 - ◆ A Contract Signed in blood
 - Customers with "better" on their mind
 - Project Manager
- Engineering Requirements Document
 - Engineering Response to Requirements
 - A Contract Signed in blood
 - Technical Customer, Project Manger
 - Engineering Manager

Follow Through

- Weekly problem review Vs. status.
 - ◆ Problem solutions Vs. requirements
 - Is the design good enough to meet requirements?
 - Avoid reporting "status" only to upper management.
 - Make them a part of the solution set.
 - Keeping solutions for problems focused and simple.

Better is the Enemy of Good Enough

- The panacea for a project...?
- No....
- One more "arrow" in the project managers "quiver" for managing.
 - Scope
 - ◆ Cost
 - ◆ Schedule